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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/658,622	09/09/2003	Toby E. Smith	67179/03-655	2550

22206 7590 03/09/2005

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EXAMINER	
MULLEN, THOMAS J	

ART UNIT	PAPER NUMBER
2632	

DATE MAILED: 03/09/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)
	10/658,622	SMITH ET AL.
	Examiner	Art Unit
	Thomas J. Mullen, Jr.	2632

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-35* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☒ Claim(s) *31,34 and 35* is/are allowed.

6)☒ Claim(s) *1,2,4-8,12,15,16 and 18-28* is/are rejected.

7)☒ Claim(s) *3,9-11,13,14,17,29,30,32 and 33* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *1/04 & 11/04*. — 4pp. total
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

1. The patent number associated with parent application 09/591,887 should be inserted in paragraph 0001 of the specification in the appropriate place.

2. The lengthy specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

Errors noted by the examiner include:

paragraph 0008, line 2, the patent number associated with application 09/285,956 should be inserted in the appropriate place;

paragraph 0014, line 5, "monitor's" should be --monitor--;

paragraph 0023, line 6, "too" should be --to--;

paragraph 0059, lines 3-4, "In more particular" is vaguely worded;

paragraph 0059, line 9, "relative" should be --relatively--;

paragraph 0074, lines 9-10, "are in present in" is vaguely worded (i.e., it appears that the first occurrence of "in" should be deleted);

paragraph 0081, line 2, "stain" should be --strain--; and

paragraph 0085, line 2, "thousands" should be --thousandths--.

3. Claims 12 and 20 are objected to under 37 CFR 1.75(c), which states in part that "(c)laims in dependent form shall be construed to include all the limitations of the claim incorporated by reference into the dependent claim". In this case each of claims 12 and 20 are directed to an "electronic patient monitor" (line 1), whereas claims 1 and 16 (from which claims 12 and 20 respectively depend) are directed to an "apparatus"; it is unclear whether "electronic patient monitor" means the same thing as "apparatus" in this context, and thus it is unclear whether or not claims 12 and 20 include all the limitations of claims 1 and 16, respectively.

4. Claims 13-14, 17, 27, 29-30 and 32-33 are objected to under 37 CFR 1.75(a) for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 13, line 19 (or part (h2), line 3), the period after "interval" should be a comma.

Claim 13, line 25 (or part (h3)(iii), line 1), "though" should be --through--.

Claim 14, lines 13 and 17, after "time" should be inserted --period-- (note "persistence time period", line 4).

Claim 17, line 3, "resetable" should be --resettable--.

Claim 27, line 1, "said optically conductive core" lacks antecedent basis.

Claim 29, "said central core first end" (line 4) and "said central core second end" (lines 5-6) lack antecedent basis; note the dependency of the claim, and note element "(c)" in claim 21.

Claim 30, the following phrases lack antecedent basis (note the dependency of the claim): "said attribute of said light"; "said light source"; "said light sensor"; and "said central core of (c6)".

At the end of claim 30, one of the periods should be deleted.

Further regarding claims 29-30, note that they refer to an "apparatus" on line 1--as does claim 1--but claim 21 (which claims 29-30 appear to belong with) is drawn to an "optical patient sensor" (line 1).

Claim 32, line 3, "said measured attenuation" lacks antecedent basis.

Claim 33, lines 2 and 8, "step" should be --steps--.

Claim 33, lines 3 and 6, "though" should be --through--.

5. The following is a quotation of the first paragraph of 35 U.S.C. 112:

> The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

6. Claims 21-28 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

Claim 21 recites among other elements, an "optically transmissive central core" (line 7). The only disclosed embodiment having such a "core" is that of Fig. 12F (having core 1240--see paragraphs 0073-0074 in the specification). Claim 21 further recites an "upper external member"

and a "lower external member" having certain structural limitations (lines 3-6), which don't appear to be described anywhere in the specification (although these "external members" appear to be depicted in cross-section in Fig. 12F). Further, claim 21 calls for a "light source" and a "light sensor" to be positioned respectively at first and second ends of the central core; however, Fig. 12F is described as having light sources 1242 "(w)ithin or proximate to the core 1240" (as shown in the figure), such that "a measure of the intensities of the light 1244 and 1246 that exits from each end of the core 1240" is used to determine patient location, i.e. it appears that light sensors (not shown in Fig. 12F) are used at both ends of the core 1240, while light sources 1242 are at neither end of the core 1240. Dependent claims 22-28 provide further recitations which also lack support in the specification (at least with respect to the embodiment of Fig. 12F). Thus, the specification and drawings fail to provide enablement for what is presently recited in claims 21-28.

7. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

8. Claim 7 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The dependency of claim 7 is on itself, which is improper; thus, the scope of this claim cannot be determined.

9. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

10. Claims 1-2, 4-6, 8, 12, 15-16 and 18-20 are rejected under 35 U.S.C. 102(e) as being anticipated by Menkedick et al. (US 6320510).

Note in Menkedick et al., apparatus comprising patient support surface 36,38 (Fig. 1); patient location sensor(s) 70,104 (see Figs. 7-8); time circuit (note "timer", col. 14, line 5); microprocessor or monitor circuit (controller 50, which is typically "microprocessor based"--col. 9, lines 27-28); and alarm (indicator lights 136, audible/visual alarm control 138, room lights 140, nurse call alarm 142, etc.--see Figs. 6-7 and col. 10, lines 39-46). Controller 50 (Fig. 7) initiates a signal indicative of a state of the patient based on output signals from the sensors (70 and/or 104) and "timer", wherein the system may operate in one of "several different modes" or environments (col. 10, lines 1-5). In the "bed sores" monitoring environment (col. 16, line 1), Menkedick et al. discloses a "patient turn interval" of, e.g., "two hours" (col. 16, line 3), i.e. the length of time since a patient last "changed location" is monitored; further, Menkedick et al implicitly defines "significant" patient movement by detecting when the patient moves "on the bed" from one location to another (see col. 15, line 52 to col. 16, line 10), as determined by outputs from sensor 104. In particular, sensor 104 includes multiple resistive pressure sensors 114-124 (see Fig. 8 and col. 9, lines 36-50), positioned at selected spaced locations on deck 22 of the bed, whose outputs (col. 9, lines 59-60) are used by controller 50 for "determining at least approximately a location of the patient on the support surface (36,38)" (see col. 8, lines 58-59 and col. 9, lines 60-63), i.e. controller 50 is able to determine the relative location of the patient on the bed and thus whether any "significant" movement has occurred.

Regarding claims 2, 4 and 18, Menkedick et al. teaches that "other types of sensors" may be used as sensor 104 (col. 12, lines 7-20), which types implicitly may form or comprise at least a "bed mat" and/or "strain gages".

Regarding claims 5 and 19, Menkedick et al. teaches various audible and/or visual "alarms" as discussed above.

Regarding claim 6, patient location sensor(s) 70 are "load cells...which are mounted at the four corners of the weigh frame 18" (see Fig. 3), and thus are "weight" sensors positioned "proximate to at least one of (the) bed legs" (i.e., proximate to casters 14).

Regarding claim 8, weigh frame 18 (discussed above) is inherently a "mattress support surface" (note mattress 38), the "weight" sensors 70 (also discussed above) being placed "proximate to a corner of (the) mattress support surface".

Regarding claims 12 and 20, as noted above controller 50 is typically "microprocessor based", and Menkedick et al further teaches that "the word controller is used broadly to include any type of control circuitry" necessary to carry out the intended functions (col. 9, lines 32-35), and thus controller 50 may be any of several (if not all) of the types listed, such as a "microcontroller".

11. Claims 3, 7, 9-11, 17 and 29-30 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112 and/or objections under 37 CFR 1.75(a) set forth in this Office action, and to include all of the limitations of the base claim and any intervening claims.

Claims 13-14, 21-28 and 32-33 would be allowable if rewritten or amended to overcome the rejection(s) under 35 U.S.C. 112 and/or objections under 37 CFR 1.75(a) set forth in this Office action.

Claims 31 and 34-35 are allowed.

12. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

The patent issuing from parent application 09/591,887 is made of record. Friedman (US 6129686) and Ortega et al (US 6287253) were of record in the parent application. Tucknott et al (US 4633237) is cited to further show the state of the art.

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thomas J. Mullen, Jr. whose telephone number is 571-272-2965. The examiner can normally be reached on Monday-Thursday from 6:30 AM to 4 PM. The examiner can also be reached on alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Daniel Wu, can be reached on (571) 272-2964. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 571-272-2600.

TJM

Thomas J. Mullen, Jr.
Primary Examiner
Art Unit 2632